

PSY29

TREATMENT COST OF FEBRILE NEUTROPENIA (FN) IN PATIENTS WITH ACUTE LEUKEMIA (AL) OR IN AUTOLOGOUS STEM CELL TRANSPLANTATION (ASCT) RECIPIENTS FROM THE GERMAN HOSPITALS PERSPECTIVE

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OBJECTIVES: To assess treatment patterns, resource consumption, and costs related to febrile neutropenia in patients with acute leukemia receiving chemotherapy (CT) or in ASCT recipients. **METHODS:** A multicentre observational cost study was conducted in 4 academic hospitals. Interim results are presented for consecutive adult patients receiving CT or ASCT between January and November 2006. FN is defined as absolute neutrophil count $<0.5 \times 10^9/L$, fever $\geq 38^\circ C$ and no hint of a non-infectious fever origin. Resource use was extracted from medical patient charts. FN related costs for medication, diagnostics, blood products and re-hospitalization are presented from a hospital provider perspective. Costs for prolonged inpatient stay due to FN are excluded (under investigation). **RESULTS:** Of 86 patients, 46 received CT and 40 ASCT. Most common disease in CT pts was AML (78%) and in ASCT pts multiple myeloma (50%) and NHL (40%). Mean \pm SD age was 55 ± 17 yrs (CT) and 57 ± 11 yrs (ASCT). A total of 96% (CT) and 98% (ASCT) of cases respectively received neutropenia/infection prophylaxes (G-CSF, GM-CSF, anti-infectives). Mean onset of FN was 12.2 ± 4.6 and 6.8 ± 2.7 days following start of CT or ASCT. Mean duration of FN episodes was 5.7 ± 4.8 days (CT) and 3.7 ± 2.3 days (ASCT); mean treatment duration of FN was 13.3 ± 8.2 days (CT) and 9.2 ± 3.2 days (ASCT). A total of 91% (CT) and 95% (ASCT) of patients received antibiotics, 46% (CT) and 28% (ASCT) antifungal agents, and 83% (CT) and 85% (ASCT) blood products. Mean treatment cost per FN episode was $\text{€}4,740 \pm 6,914$ (Range: 0–32,455) for CT cases and $\text{€}1,656 \pm 1,225$ (range: 0–5,721) for ASCT cases. Main cost drivers were anti-infective drugs which accounted for 62% of cost in CT patients, and 43% of cost in ASCT patients. **CONCLUSIONS:** FN induces significant costs in German hospitals with highest average cost for patients with AL receiving chemotherapy.

PSY30

HEALTH CARE RESOURCE USE AND COSTS AMONG PATIENTS WITH DIABETIC NEUROPATHIC PAIN IN THE ONE-YEAR FOLLOWING DULOXETINE THERAPY: IS INITIAL DOSING A SIGNIFICANT FACTOR?

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OBJECTIVES: This study examines factors associated with health care costs among working age patients with diabetic neuropathic pain (DNP) who are undergoing duloxetine therapy. **METHODS:** Using a retrospective cohort design and claims data, we assessed the predictors of total health care costs over a one-year follow-up period for patients (18–64 years) with 30+ days of available duloxetine therapy between October 1, 2004 and December 31, 2005. The index date was defined as the first observed pharmacy claim for duloxetine. All individuals selected had 1+ diabetic neuropathy diagnosis and pain medication dispensed in the 12 months pre-index. Two cohorts of patients were constructed for individuals with a starting duloxetine dose of 30

(“Dulox30”) and 60 (“Dulox60”) milligrams, respectively. Base-line demographic and clinical characteristics were assessed for each cohort, as was prior use of pain medications. Resource utilization and expenditures were evaluated over 12-months following index. Multivariate linear regression was performed to assess whether initial dose of duloxetine was correlated with health care costs, controlling for demographic and clinical characteristics. **RESULTS:** We identified 196 Dulox30 patients and 655 Dulox60 patients. The Dulox30 and Dulox60 groups were similar by age (55.0 vs 54.2, $p = 0.16$), and gender (59.2% vs. 58.4% female, $p = 0.85$). A higher proportion of patients in Dulox30 group had 4+ diabetes-related complications (26.5% vs 18.4%, $p < 0.01$) and a Charlson Comorbidity score > 1 (23.0% vs 17.6%, $p = 0.03$) relative to those in the Dulox60 group. Prior use of antidepressants was greater among Dulox60 patients whereas Dulox30 patients were more likely to receive oxycodone and hydrocodone (all $p < 0.01$). After adjusting for patient characteristics, patients in both cohorts had similar total health care costs ($p = 0.95$). Factors associated with increased costs included advancing age, prior pain-related hospitalizations, insulin therapy, diabetes-related complications, and other chronic comorbidities. **CONCLUSIONS:** These findings indicate that one-year health care costs were similar for DNP patients receiving duloxetine therapy, regardless of initial dose.

PSY31

ECONOMIC IMPACT OF THE FABRY-ANDERSON DISEASE TREATMENT

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OBJECTIVES: Fabry-Anderson disease (α -galactosidase A deficiency) is a rare, x-linked lysosomal storage disorder that can cause early death from renal, cardiac and cerebrovascular involvement. The specific treatment currently available for Fabry-Anderson disease consists of intravenous enzymatic replacement therapy (ERT) every 2 weeks of the enzyme α -galactosidase A. The aim of the study was to evaluate the economic impact of the Fabry-Anderson Disease treatment. **METHODS:** The study was a naturalistic, longitudinal retrospective Cost of Treatment study. Patients were enrolled during the 2001–2004 period and followed until 2007. Direct health care resources attributable to disease management (drugs, ambulatory care, day case treatments, hospitalizations, specialist visits, diagnostics and laboratory exams) were quantified using National Health Service (NHS) tariffs expressed in Euro 2008. NHS perspective was adopted. Health-related quality of life information were also collected using SF-36 questionnaire at the enrolment and after 2 and 5 years of treatment. **METHODS:** T **RESULTS:** We enrolled 15 patients (males 53.3%, mean age of 40.27 ± 14.76 y.o.) from the Nephrology Department of the University “Federico II” of Naples, with a mean follow-up of 5.53 ± 1.13 years. The average monthly cost of care as $\text{€}22,536.46 \pm \text{€}2,247.93$ per patient, mainly because of treatment products. ERT therapy represented 96.2% of the expenses. SF-36 results showed a significant improvement in all the domains in particular in the physical domains. **CONCLUSIONS:** This is the first study evaluating the socio-economic impact of Fabry-Anderson Disease treatment in Italy. This study showed that this rare disease requires large amounts of resources for the management, but it also demonstrated that effective care provides a satisfactory quality of life. To the best of our knowledge this seems to be the highest cost of treatment.